

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GERARD J. DEMOTT,
THOMAS J. TAYLOR
and GLENN S ASPHOLM

Appeal No. 1997-1001
Application 08/369,202¹

ON BRIEF

Before JOHN D. SMITH, PAK and LIEBERMAN, Administrative Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal pursuant to 35 U.S.C. § 134 from the
final rejection of claims 1-6 and 13-16.

¹ Application for patent filed January 5, 1995.

Appealed claim 1 is representative and is reproduced
below:

1. An aqueous binder solution suitable for applying to fiberglass as a binder, said binder having high binding efficiency, said composition prepared by the steps comprising:

(A) selecting an aqueous resole having a pH greater than 7, prepared by reacting phenol with excess formaldehyde under alkaline conditions;

(B) adding to said aqueous resole (A) urea in an amount from about 20 to about 70 parts by weight based on 100 parts by weight of the phenol/formaldehyde resole solids in component A and reacting to form a urea-extended prereact;

(C) dissolving into said prereact from about 1 to about 10 weight percent melamine based on the weight of the solids in the urea-extended phenol/formaldehyde prereact (B);

wherein said alkaline resole contains sufficient excess formaldehyde to react with said urea and said melamine on a substantially equimolar basis.

The reference of record relied upon by the examiner is:

Coventry et al. (Coventry)	5,300,562	April 5,
1994		

The appealed claims stand rejected² under 35 U.S.C. § 103 as unpatentable over Coventry.

² The claims stand or fall together. See the brief at page 5.

The subject matter on appeal is directed to an aqueous binder solution suitable for application to fiberglass insulation products which has a high binder efficiency. At the outset, it is significant to note that appellants' aqueous binder solution is defined by the appealed claims by a process of making it. Thus, to a selected aqueous resole having a pH greater than 7 and excess formaldehyde, urea is added and reacted as defined by process step (B) in claim 1 to form a urea-extending prereact. According to appellants' specification at page 10, lines 19-23, this resultant urea-extended alkaline prereact "[m]ust yet contain enough formaldehyde to react with the amount of melamine to be added." As set forth in step (C) of claim 1 of appellants' process, melamine is dissolved into the step (B) prereact wherein it presumably reacts with some remaining unreacted formaldehyde in the prereact.

The applied prior art reference to Coventry discloses, in relevant part, that a modified phenolic resole resin, which may be used in lieu of a "premix³," may be formed by a process

³ A "premix" is a binder prepared by the prereaction of a resole resin with urea at around room temperature. To prepare

in which an aqueous alkaline resole resin is modified at a resin manufacturing site by mixing with "two or more nitrogenous reactants" (column 5, lines 3-4) including, inter alia, ammonia, urea, and melamine (column 5, lines 6-17). The weight ratio⁴ of ammonia (the "first" nitrogenous reactant) to the unmodified resole resin may be as low as 1:100 and when urea is the "second" nitrogenous reactant, the mole ratio of urea to the free formaldehyde in the aqueous resole solution is preferably about 1:1. See column 5, line 23 of Coventry. Based on these disclosures, we agree with the examiner that Coventry fairly suggests the combined use of ammonia⁵, urea, and melamine as "first" and "second" nitrogenous reactants for addition to and reaction with Coventry's aqueous resole resin composition in proportions which overlap the proportions required for appellants' claimed urea and melamine reactants.

the phenolic binder for its ultimate use with fiberglass, curing catalysts, lubricants, and silane adhesion promoting compounds may be added to the premix "just before use." See column 1, lines 44-48 and column 5, line 48 to column 6, line 5 of Coventry.

⁴ See column 5, line 18 of Coventry.

⁵ The appealed "comprising" claims do not exclude the use of an ammonia reactant.

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Although the processing aspects of the appealed product-by-process claims require the separate and sequential addition of urea and melamine to the resole resin solution, the appealed claims are nevertheless directed to a product, i.e., an aqueous binder solution. Thus, the determination of the patentability of the appealed claims must be based on the product itself, not the process of making it. See In re Thorpe, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985) ("If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.") From a structural perspective, it reasonably appears that the aqueous binder solution defined by the herein product-by-process claims is the same as or only slightly different from the suggested prior art ammonia, urea, melamine modified resin binder solution of Coventry.

We have not ignored appellants' arguments which stress that appellants' intention is to produce a "prereact binder with greater binding efficiency." See the reply brief at page 2. However, appellants' claims are directed to an aqueous

binder solution wherein a "prereact" is further modified by reaction with melamine, much like the suggested prior art ammonia, urea, melamine modified resin solution of Coventry which is described as useful "in lieu of a premix" and as having "reduced precure" in comparison with binders prepared using urea as the sole nitrogenous reactant. See column 5, lines 3-5 and column 6, lines 6-10 of Coventry. With respect to the high binding efficiency associated with appellants' binder solutions, we observe that appellants have provided no objective evidence in this record demonstrating any differences in binding efficiencies with Coventry's preferred ammonia/urea modified binder solution. In this regard, the tested binder efficiency for the comparative control sample in Table 1 at page 15 of the specification involves the testing of a traditional urea binder prereact.

In light of the above, we affirm the examiner's rejection of the appealed claims under 35 U.S.C. § 103. However, we denominate our affirmance as involving a new rejection pursuant to 37 CFR § 1.196(b) since our analysis of the patentability issues is based on product-by-process legal principles.

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In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

(b) Appellant may file a single request for rehearing within two months from the date of the original decision

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR

§ 1.197 (c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will

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be remanded to the examiner

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record

Should the appellant elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed

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rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED 196(b)

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JOHN D. SMITH)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
CHUNG K. PAK)	
Administrative Patent Judge)	APPEALS AND
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)	INTERFERENCES
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PAUL LIEBERMAN)	
Administrative Patent Judge)	

JDS:hh

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CORNELIUS P. QUINN
SCHULLER INTERNATIONAL INC.
P.O. BOX 5108
DENVER, CO 80217